

Claims:

1. A method for managing call control data installed in respective ones of a plurality of call agents which is distributed on a packet-based network, comprising the steps of:

a) setting each of the call agents to be a client
5 of a server which is provided on the packet-based network;

at the server,

b) storing master call control data required in respective ones of the call agents;

c) managing the master call control data; and

at each of the call agents,

d) storing a copy of corresponding master call control data so that the call agents perform network-wide call control.

2. The method according to claim 1, wherein, when a
15 change occurs in the master call control data, the server instructs a corresponding call agent to update call control data stored in the corresponding call agent so as to reflect the change.

3. The method according to claim 1, further comprising
20 the steps of:

transmitting a data check request from the server

to a designated call agent;

checking whether copied call control data stored in the designated call agent matches a corresponding master call control data stored in the server; and

5 when the copied call control data does not match the corresponding master call control data, instructing the designated call agent to update the copied call control data so as to make it equal to the corresponding master call control data.

10 4. The method according to claim 1, further comprising the steps of:

15 transmitting a data check request from a call agent to the server;

checking whether copied call control data stored in the call agent matches a corresponding master call control data stored in the server; and

20 when the copied call control data does not match the corresponding master call control data, updating the copied call control data so as to make it equal to the corresponding master call control data.

5. The method according to claim 1, wherein the step (a) comprises the steps of:

a.1) the call agent transmitting a server search message to a server;

a.2) when receiving the server search message, the server determining whether the call agent can be managed;

a.3) when it is determined that the call agent can be managed, the server transmitting a response message back to the call agent;

a.4) when receiving the response message, the call agent transmitting a registration request to the server;

a.5) when receiving the registration request, the server registering the call agent as a client when the call agent satisfies registration requirement.

6. The method according to claim 5, wherein when it is determined in the step (a.2) that the call agent cannot be managed, the server transmits a re-search instruction message to the call agent, the re-search instruction message designating another server,

wherein, when receiving the re-search instruction, the call agent transmits a server search message to the designated server.

7. A system for managing call control data installed in respective ones of a plurality of call agents which is distributed on a packet-based network, comprising:

a server provided on the packet-based network, the server storing master call control data required in respective ones of the call agents; and

a maintenance terminal provided on the packet-based network, the maintenance terminal performing maintenance of the master call control data by getting access to the server, wherein each of the call agents stores a copy of corresponding master call control data so that the call agents perform network-wide call control.

8. The system according to claim 7, wherein the server comprises:

a master data management database storing the master call control data; and

a server controller for controlling each of the call agents and the master data management database such that, when a change occurs in the master call control data, a corresponding call agent is instructed to update call control data stored therein to reflect the change.

9. The system according to claim 8, wherein the server controller transmits a data check request to a designated call agent, determines whether copied call control data stored in the designated call agent matches a corresponding master call control data stored in the server, and, when the copied call control data does not match the corresponding master call control data, instructs the designated call agent to update the copied call control data so as to make it equal to the corresponding master call control data.

10. The system according to claim 8, wherein each of the call agents comprises:

a copied data management database storing the copy of the corresponding master call control data;

5 a call controller for performing call control based on the copy of the corresponding master call control data; and

a call agent controller for controlling the copied data management database such that, when receiving a data update instruction from the server, the copied call control data is updated to make it equal to the corresponding master call control data.

11. A system for managing call control data installed in respective ones of a plurality of call agents which is distributed on a packet-based network, comprising:

15 a plurality of servers provided on the packet-based network, the servers storing different types of master call control data required in respective ones of the call agents; and

20 a maintenance terminal provided on the packet-based network, the maintenance terminal performing maintenance of the master call control data by getting access to each of the servers,

wherein each of the call agents stores a copy of each type of the master call control data so that the call agents

perform network-wide call control.

12. The system according to claim 11, wherein the different types of master call control data are system data, resource data, and number translation and routing data.

5 13. A system for managing call control data installed in respective ones of a plurality of call agents which is distributed on a packet-based network, comprising:

a plurality of servers provided on the packet-based network, each of the servers storing master call control data required in respective ones of the call agents; and

a maintenance terminal provided on the packet-based network, the maintenance terminal performing maintenance of the master call control data by getting access to each of the servers,

15 wherein each of the call agents is registered as a client of a different one of the servers to store a copy of corresponding master call control data.